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ABSTRACT

A study examined the relationship between communication apprehension and the six learning styles of the Grasha-Riechmann Student Learning Styles Scale (GRSLSS). Data were gathered from 325 undergraduates enrolled in an introductory course in interpersonal communication who completed J. McCroskey's Personal Report of Communication Apprehension (PRCA-24), and the GRSLSS. Results indicated that low, moderate, and high communication apprehensive students differ in their preferences for learning styles, and communication apprehension correlates moderately but significantly with four of the six GRSLSS learning styles. (Two tables of data are included; 36 references are attached.) (Author/PRA)

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Communication Apprehension and Learning Styles

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COMMUNICATION APPREHENSION AND LEARNING STYLES

ABSTRACT

This study examined the relationship between communication apprehension and the six learning styles of the Grasha-Riechmann Student Learning Styles Scale (GRSLSS). Data were gathered from 325 undergraduates enrolled in an introductory course in interpersonal communication who completed McCroskey's PRCA-24 and the GRSLSS. Results indicate that low, moderate, and high communication apprehensive students differ in their preferences for learning styles, and communication apprehension correlates moderately but significantly with four of the six GRSLSS learning styles.

COMMUNICATION APPREHENSION AND LEARNING STYLES

A student's ability to communicate effectively in the classroom is essential to his/her academic success (McCroskey, 1977; Richmond, 1984; Daly & Stafford, 1984). Educators address this need by implementing courses designed to teach students how to communicate effectively in a variety of contexts. Unfortunately, not all students enter these classes with a willingness to communicate. Approximately 12.6 million students are high communication apprehensives (McCroskey, 1977; United States Bureau of the Census, 1989, p. 124). Compared to students who are low in communication apprehension, high communication apprehensives have lower overall grade point averages, develop more negative attitudes towards school at all levels, receive lower final course grades, score lower on standardized achievement tests, and are perceived less positively by their teachers and classmates (McCroskey, 1977; Hurt & Preiss, 1978; Powers & Smythe, 1980; Comadena & Comadena, 1984; Comadena & Prusank, 1988; Richmond & McCroskey, 1989; Watson & Monroe, 1990). The consensus of these and other studies is that HCA students operate at a distinct disadvantage in school (McCroskey, 1977; Daly & Stafford, 1984; Richmond, 1984; Richmond & McCroskey, 1989).

LEARNING STYLES

One variable in the CA-achievement relationship that has been relatively unexplored is a student's preferred learning style. Andersen & Bell-Daquilante (1980) argue that a learning style is "primarily related to intellectual ability differences, process and modality differences in learning, cognitive style differences, and noncognitive personality differences" (p. 1). An individual's predisposition towards communication is a potential indicator of learning style preference which in turn mediates academic achievement (Andersen & Bell-Daquilante, 1980; Allen, O'Mara, & Long, 1987).

Few studies have attempted to examine the relationship between CA and learning style preferences. Andersen & Bell-Daquilante (1980) found a modest association between preference for an active learning style and active dimensions of communication style as well as preferences for concrete learning experiences and concrete dimensions of communication style. Allen, O'Mara & Long (1987) found no statistically significant differences between low, moderate, and high CAs and learning style preferences and no strong correlations between CA and learning style preferences.

The rationale for the study reported here is threefold. First, a growing body of literature suggests that student achievement, at all educational levels and across different content areas, is enhanced when students are taught through their preferred learning style. Conversely, achievement declines when students are taught through a less preferred learning style (Thelen, 1967; Farr, 1971; Douglas, 1979; Trautman, 1979; Cafferty, 1980; Carbo, 1980). If CA and learning style are related, the debilitating affect of CA on achievement may be compounded for the apprehensive student when the form of instruction in a given classroom does not match his/her preferred learning style. A better understanding of the relationship between communication apprehension and learning style would help instructors to adapt to the particular needs of apprehensive students in an effort to maximize academic achievement despite the student's apprehension.

Second, two of the three studies reviewed here (Andersen & Bell-Daquilante, 1980;) used Kolb's LSI instrument to operationalize learning style. A growing body of literature has challenged the reliability and validity of this instrument (Geller, 1979; Freedman & Stumpf, 1978, 1980; Lamb & Certo, 1978; Catalanello & Brenenstuhl, 1978; Highhouse & Doverspike, 1987). Andersen & Bell-Daquilante (1980) concluded that the active-passive dimension of Kolb's LSI operates with more face validity than the concrete-abstract dimension and caution that the LSI "needs much empirical validation before it becomes widely acceptable as an appropriate categorical scheme" (p. 8). DeStephen, Fetzger, & Corba (1989), in the most recent review of Kolb's revised LSI instrument, concluded that, "given the moderate reliability, limited support for the validity of the constructs being measured and intercorrelations of the scales, caution should be used . . . [when] basing decisions on the results of the [LSI] inventory"(p. 17). In contrast, the study reported here relied upon the Grasha-Riechmann (1972) Student Learning Style Scale (GRSLSS) as an alternative to Kolb's LSI.

Third, given the limited number of studies that have examined the relationship between CA and learning style, and the inconclusiveness of their findings, additional research is justified in an attempt to develop a consensus of evidence on this issue (Tukey, 1969; Selltiz, Wrightsman, & Cook, 1976; Tucker, Weaver, & Berryman-Fink, 1981; Babbie, 1986). In particular, it would be premature to conclude on the basis of Allen, O'Mara, & Long's (1987) work that no significant relationship exists between CA and learning styles. "No single behavorial experiment can, by itself, establish a principle, generalization, or theory" (Tucker, Weaver, & Berryman-Fink, 1981, p. 134). "Only after the results of a study have been retested several times should people accept these findings. Preferably such replications should take place in different locations, by different researchers using identical or very similar research methods" (Emmert & Barker, 1989, p. 6).

The purpose of the study reported here was to examine the relationship between communication apprehension and learning styles by replicating a portion of the work of Allen,

O'Mara, & Long (1987). Two research questions were explored:

R1: Is there a statistically significant difference among the learning styles preferred by low, moderate, and high communication apprehensive students?

R2: Is there a statistically significant relationship among communication apprehension and the six learning styles of the Grasha-Riechmann GRSLSS?

METHOD

Respondents

Data were collected from undergraduate students enrolled in an eighteen week course in interpersonal communication at a midwestern university in the Fall of 1989. The thirteen sections surveyed yielded a sample size of three hundred and twenty-five respondents (N = 325). The average age of respondents was 19 (SD = 2.94, range: 17-43) and there were more females (n = 205, 63%) than males (n = 120, 37%) in the sample. The majority of respondents were freshman (n = 246, 76%) with undeclared majors (n = 131, 40%) who had completed approximately 19 credit hours (M = 18.99, SD = 12.44).

Procedures

At the end of the Fall semester, students were given an opportunity to earn "extra-credit" points by participating in the research project. Respondents signed a consent form, completed a short demographic questionnaire, McCroskey's PRCA-24, and the Grasha-Riechmann Student Learning Styles Scale. One-way analysis of variance using the Tukey-B multiple comparison procedure was used to compare low, moderate, and high CA respondents (see Table 1). The alpha value was set at .05. Pearson product moment correlations with alpha set at .05 were computed for PRCA scores and each of the five learning styles of the GRSLSS (see Table 2).

Measures

Communication apprehension was operationalized using McCroskey's PRCA-24

(McCroskey, 1982). Using standard deviation splits on the PRCA-24 score (M = 64.78; SD = 15.03) respondents were classified as either low (n = 52, M = 42.12, SD = 6.04), moderate (n = 212, M = 63.89, SD = 7.22), or high (n = 61, M = 87.21, SD = 6.74). Data from the current sample yielded an alpha coefficient of .92 for the PRCA-24.

The Grasha-Riechmann (1972) Student Learning Style Scale (GRSLSS) was used as the measure of learning style. The GRSLSS is a ninety item self-report instrument consisting of six, fifteen item subscales that reflect different learning styles. Each of the ninety items uses a five point Likert scale ranging from "strongly disagree' to "strongly agree." The six subscales are independent, avoidant, collaborative, dependent, competitive, and participant. Each student receives a score for each of the six subscales.

The independent subscale reflects the student who likes to think for him/herself (e.g., I think I can determine what the important content issues are in a course; I am confident in my abilities to learn important course material). The avoidant subscale reflects the student who is not interested in learning course content in the traditional classroom (e.g., I feel that classroom activities are generally boring; school does not really interest me). The collaborative subscale reflects the student who feels he/she can learn the most by sharing ideas and talents with others (e.g., I like to study for tests with other students; I think students should be encouraged to work together). The dependent subscale reflects the student who shows little intellectual curiosity and who learns only what is required (e.g., I like tests taken right out of the book; I think the instructor should emphasize the content that I must learn). The competitive subscale reflects the student who learns material in order to perform better than others in class (e.g., I like other students to know when I have done a good job; I feel that I must compete with other students to get a grade). The participant subscale reflects the student who wants to learn course content and enjoys attending class (e.g., I attend classes because I want to learn something; I am eager to learn about areas covered in class).

Curry (1983) has identified the Grasha-Riechmann instrument as demonstrating sufficient reliability and validity with an average test-retest correlation of .80 across scales within the measure. Data from the current sample yielded modest alpha coefficients for the six scales (.50 dependent, .68 competitive, .55 independent, .81 avoidant, .77 collaborative, and .78 participant).

RESULTS

Both research questions can be answered in the affirmative. The results obtained in this study suggest a statistically significant relationship among communication apprehension and learning styles as measured by the GRSLSS. Table 1 indicates that low, moderate, and high CA students differ in their learning style preferences. Low CAs scored higher on the participant (F = 10.6, p <.001), collaborative (F = 7.04, p <.001), and independent (F = 7.4, p <.001) learning styles than HCAs. HCAs scored higher than low and moderate CAs on the avoidant learning style (F = 15.86, p <.001). Table 2 reveals that communication apprehension correlates with the independent (r = -.20, p <.001), avoidant (r = .35, p <.001), collaborative (r = -.22, p <.001), and participant (r = -.25, p <.001) learning styles. CA did not correlate with either the competitive or dependent learning styles.

DISCUSSION

CA appears to be much more strongly correlated with learning style as measured by the GRSLSS than has been observed in previous studies. In this study CA correlated moderately with four of the six GRSLSS learning styles. Both LCA and MCA students demonstrate the strongest preference for a participant learning style. These students want to learn course content, like to go to class, and take responsibility for getting the most out of classes (Riechmann & Grasha, 1974). LCA and MCA students were significantly less likely to adopt the collaborative learning style preferred by HCA students. The collaborative learning style preferred by HCA students emphasizes the sharing of ideas with faculty and students and working in groups (Riechmann &

Grasha, 1974). Riechmann and Grasha (1974) also found that this scale correlated with more passive instructional strategies which HCAs identify as their preferred instructional strategies. HCA students were significantly less likely to adopt a participant learning style. HCAs scored higher on the avoidant learning style than either LCA or MCA students. In fact, the avoidant style correlated more strongly with CA than any of the other learning styles ($r = .35$, $p < .001$). As CA increases a student's preference for the avoidant learning style increases as well. This style is characterized by a lack of participation, disinterest in learning, and lower grades (Riechmann & Grasha, 1974). These characteristics are entirely consistent with the typical characterization of the HCA student (Daly & Stafford, 1984; Richmond, 1984).

The results of this study suggests that additional work needs to be done identifying the exact nature of the relationship between CA and preferences for various learning styles. For example, what are the similarities between how CA and learning style preferences develop? What affects will an individual's preference for a particular learning style have upon various treatment modalities? Learning style preferences may be a moderating variable that will influence the effectiveness of treatments designed to reduce CA. At the very least, a fuller understanding of the relationship between learning style preferences, CA, and treatment is warranted.

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Table 1

Means and Standard Deviations for Communication Apprehension and Learning Styles

	LOW CA		MODERATE CA		HIGH CA	
	MEAN	SD	MEAN	SD	MEAN	SD
CA	42.12	(6.04)a	63.89	(7.22)ab	87.21	(6.74)ab
IND	48.15	(4.67)a	47.03	(4.84)b	44.75	(5.46)ab
AVO	31.73	(7.57)a	36.31	(6.47)ab	39.19	(8.53)ab
COL	57.79	(6.06)a	54.75	(6.28)b	53.44	(6.75)ab
DEP	51.25	(4.80)	51.57	(4.85)	52.23	(4.38)
PAR	58.11	(5.47)a	55.43	(5.78)ab	52.74	(7.95)ab
COM	41.65	(8.16)	43.58	(6.23)b	41.13	(5.87)b

Matching letters in same row are significantly different at $p < .05$.

CA = PRCA
IND = Independent
AVO = Avoidant
COL = Collaborative
DEP = Dependent
COM = Competitive
PAR = Participant

Table 2

Correlations Among PRCA and Learning Styles

	IND	AVO	COL	DEP	COM	PAR
CA	-.20***	.35***	-.22***	.09	.01	-.25***
IND		-.06	.28***	-.25***	.11*	.12**
AVO			-.33***	-.05	.15**	-.69***
COL				.08	-.07	.33***
DEP					.23***	.35***
COM						.11*

*p <.05
**p <.01
***p <.001

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